

WHAT IS CLAIMED IS:

1. An imaging system comprising:

an optical-system holding member for holding an optical system to form an optical image of a subject;

an imaging-device holding member for holding an imaging device to obtain the optical image formed by the optical system;

a case for hermetically enclosing the optical-system holding member and the imaging-device holding member;

a hermetic connector for hermetically sealing the case, the hermetic connector being electrically connected to the imaging device;

a power generator for generating a driving force to move either the optical-system holding member or the imaging-device holding member; and

a driving-force transfer member for connecting the power generator and either the optical-system holding member or the imaging-device holding member to transfer the driving force of the power generator to either the optical-system holding member or the imaging-device holding member.

2. The imaging system according to Claim 1, wherein the optical-system holding member and the imaging-device holding member are disposed in the internal space of the case.

3. The imaging system according to Claim 1, wherein

the optical-system holding member and the imaging-device holding member are connected through a retractable elastic member to constitute the case.

4. The imaging system according to Claim 1, wherein the driving-force transfer member allows the optical-system holding member to be movable forward and backward along the optical axis relative to the imaging-device holding member.

5. The imaging system according to Claim 1, wherein the driving-force transfer member allows the imaging-device holding member to be movable forward and backward along the optical axis relative to the optical system holding member.

6. The imaging system according to Claim 2, wherein the power generator and the driving-force transfer member are disposed in the case.

7. The imaging system according to Claim 2, wherein the power generator and the driving-force transfer member are disposed on the outside of the case.

8. The imaging system according to Claim 2, wherein the optical-system holding member has a slide contact surface which is slidable on the inner wall of the case,

a protrusion on the outer surface of the optical-system holding member is come into contact with a contact portion on the inner wall of the case to restrict the forward movement of the optical-system holding member, and the rear end, including the protrusion, of the optical-system holding

member is come into contact with the imaging-device holding member to restrict the backward movement thereof along the optical axis.

9. The imaging device according to Claim 3, wherein the power generator and the driving-force transfer member are disposed in the case.

10. The imaging device according to Claim 3, wherein the imaging-device holding member has a slide contact surface which is slidable on the inner wall of a housing which encloses the case, and

the elastic member restricts the forward or backward movement of the imaging-device holding member along the optical axis.

11. The imaging device according to Claim 6, wherein the power generator includes a motor unit, and the driving-force transfer member mechanically connects to the motor unit to transfer torque of the motor unit.

12. The imaging system according to Claim 6, wherein the power generator includes a piezoelectric unit, and the driving-force transfer member mechanically connects to the piezoelectric unit to transfer the expansion and contraction of the piezoelectric unit.

13. The imaging system according to Claim 7, wherein the power generator includes a motor unit, and the driving-force transfer member mechanically connects

to the motor unit to transfer torque of the motor unit.

14. The imaging system according to Claim 9, wherein the power generator includes a piezoelectric unit, and the driving-force transfer member mechanically connects to the piezoelectric unit to transfer the expansion and contraction of the piezoelectric unit.

15. The imaging system according to Claim 13, further comprising:

a movable member which is magnetically connected to the optical-system holding member and is movable forward and backward along the optical axis, the movable member being arranged on the outside of the case, wherein

the driving-force transfer member mechanically connects to the movable member to permit the movable member to be movable forward and backward along the optical axis.

16. An imaging system comprising:

an optical system for forming an optical image of a subject;

an imaging device for obtaining the optical image formed by the optical system;

a case for enclosing the optical system and the imaging device;

a hermetic connector for hermetically sealing the case, the hermetic connector being electrically connected to the imaging device;

a holding member for holding the optical system so that the optical system is movable forward and backward along the optical axis relative to the imaging device, the holding member being disposed in the case;

a power generator for generating a driving force to move the holding member; and

a driving-force transfer member for connecting the power generator and the holding member to transfer the driving force of the power generator to the holding member.

17. The imaging system according to Claim 16, wherein the power generator and the driving-force transfer member are disposed in the case.

18. The imaging system according to Claim 16, wherein the power generator and the driving-force transfer member are disposed on the outside of the case.

19. The imaging system according to Claim 16, wherein the holding member and the optical system holding member for holding the optical system are connected through a retractable elastic member to constitute the case.

20. The imaging system according to Claim 17, wherein the holding member has a slide contact surface which is slidable on the inner wall of the case,

a protrusion on the outer surface of the holding member is come into contact with a contact portion on the inner wall of the case to restrict the forward movement of the

holding member, and the rear end, including the protrusion, of the holding member is come into contact with an imaging-device holding member to restrict the backward movement thereof along the optical axis.

21. The imaging system according to Claim 17, wherein the power generator includes a motor unit, and the driving-force transfer member mechanically connects to the motor unit to transfer torque of the motor unit.

22. The imaging system according to Claim 17, wherein the power generator includes a piezoelectric unit, and the driving-force transfer member mechanically connects to the piezoelectric unit to transfer the expansion and contraction of the piezoelectric unit.

23. The imaging system according to Claim 18, wherein the power generator includes a motor unit, and the driving-force transfer member mechanically connects to the motor unit to transfer torque of the motor unit.

24. The imaging system according to Claim 19, wherein the power generator and the driving-force transfer member are disposed in the case.

25. The imaging system according to Claim 19, wherein the holding member has a slide contact surface which is slidable on the inner wall of a housing enclosing the case, and

the elastic member restricts the forward or backward

movement of the holding member along the optical axis.

26. The imaging system according to Claim 23, further comprising:

a movable member which is magnetically coupled with the optical-system holding member and is movable backward and forward along the optical axis, the movable member being disposed on the outside of the case, wherein

the driving-force transfer member mechanically connects to the movable member to permit the movable member to be movable forward and backward along the optical axis.

27. The imaging system according to Claim 25, wherein the power generator includes a piezoelectric unit, and the driving-force transfer member mechanically connects to the piezoelectric unit to transfer the expansion and contraction of the piezoelectric unit.

28. An imaging system comprising:

an optical system for forming an optical image of a subject;

an imaging device for obtaining the optical image formed by the optical system;

a case for enclosing the optical system and the imaging device;

a hermetic connector for hermetically sealing the case, the hermetic connector being electrically connected to the imaging device;

a holding member for holding the optical system so that the optical system is movable forward and backward along the optical axis relative to the imaging device, the holding member being arranged in the case;

a power generator for generating a driving force to move the holding member on the basis of electric energy which is supplied through the hermetic connector; and

a driving-force transfer member for connecting the power generator and the holding member to transfer the driving force of the power generator to the holding member.